

# MONTHLY WEATHER REVIEW,

## FEBRUARY, 1879.

(General Weather Service of the United States.)

WAR DEPARTMENT,

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

### INTRODUCTION.

In compiling the present REVIEW the following data, received up to March 14th, have been made use of, viz: the regular tri-daily weather charts, containing the data of simultaneous observations taken at 119 Signal Service stations and 11 Canadian stations, as telegraphed to this office; monthly journals and means, 126 and 145 respectively, from the former, and monthly means from 13 of the latter; reports from 26 special Sunset stations; 232 monthly registers from Voluntary Observers; 48 monthly registers from United States Army Post Surgeons; Marine Records; International Simultaneous Observations; monthly reports from Voluntary Observers in, and the local Weather Services of the States of Iowa and Missouri; reliable newspaper extracts; special reports.

### BAROMETRIC PRESSURE.

Upon chart No. II is exhibited by the isobaric lines the general distribution of the atmospheric pressure, as reduced to sea-level, for the month. Compared with the means for February of previous years, those of the present month are decidedly above the normal on the Pacific coast from San Francisco northward, in the Northwest and over the Gulf States, but are about normal in the Atlantic States and Lake region.

*The Local Barometric Ranges* for the month, as reduced to sea-level, have been largest over New England and New York, and smallest along the Gulf coast and from the Rocky mountains westward. Taken by districts they vary as follows: New England, from 1.85 at Eastport to 1.55 at New Haven and 1.33 on summit of Mt. Washington; Middle Atlantic States, 1.63 at Albany to 1.11 at Norfolk; South Atlantic States, 1.00 at Charlotte to 0.61 at Jacksonville; Lake region, 1.52 at Rochester to 1.04 at Milwaukee; Ohio valley and Tennessee, 1.23 at Pittsburg to 0.88 at Chattanooga and 0.96 at Nashville; Gulf States, 0.35 at Key West to 0.71 at Montgomery, 0.74 at Indianola and 0.93 at Corsicana; the Northwest and Eastern slope of the Rocky mountains, 1.42 at Pembina to 0.98 at La Crosse, 1.26 at North Platte and 1.05 at Fort Sill; Rocky mountains, 0.50 at Cheyenne to 0.72 at Santa Fe and 0.74 at Pike's Peak; Western plateau, 0.55 at Winnemucca to 0.80 at Boise City; California 0.43 at Red Bluff to 0.62 at San Francisco.

*Areas of High Barometer.*—Nine are described below. Six of these first appeared north of Dakota or Minnesota, and moved south or east towards the Gulf or Atlantic coasts. Nos. II, VI and IX appeared over the Pacific States, over which region the pressure was above the normal on twenty-four days.

No. I—is a continuation of area No. XI, noticed in the *January Review*. It was central over the Northwest on January 30th and 31st, during which days a severe northerly snow-storm prevailed in central Nebraska. In consequence of this snow, remaining on the ground throughout the entire month of February, and the prevailing low temperatures, thousands of cattle are reported to have died on the plains. From February 1st to 3rd the highest pressure moved south-southeast to the Gulf of Mexico, and cool northwesterly winds, gradually backing to warmer west or southwest, prevailed west of the Mississippi. The minimum temperatures of the month prevailed in the South Atlantic States and Florida from the 2nd to the 4th. In Texas northeasterly winds, with cloudy and rainy weather, backed to warmer southerly on the 3rd, in advance of low pressure area No. II.

No. II—continued over Washington Territory and Oregon from the 1st to the 5th. During these days cool, clear weather and northerly winds generally prevailed throughout the Pacific States, excepting the rain in southern California on the 3rd and 4th, attending low area No. II. On the 4th the winds increased to brisk and high in the Sacramento valley, and on the 5th the pressure commenced falling north of Oregon, with southerly winds and by night light rains, in advance of low area No. IV. From the 5th to the 7th